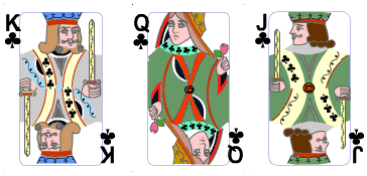
Expand these:

$$(x+1)^2$$

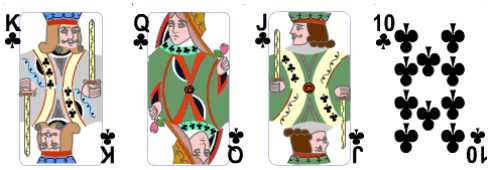
$$(x+1)^3$$

$$(x+1)^4$$

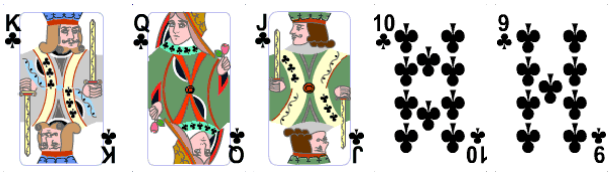
$$(2x+1)^3$$



From 3 cards, how many ways can you choose 0, 1, 2 or 3 cards?

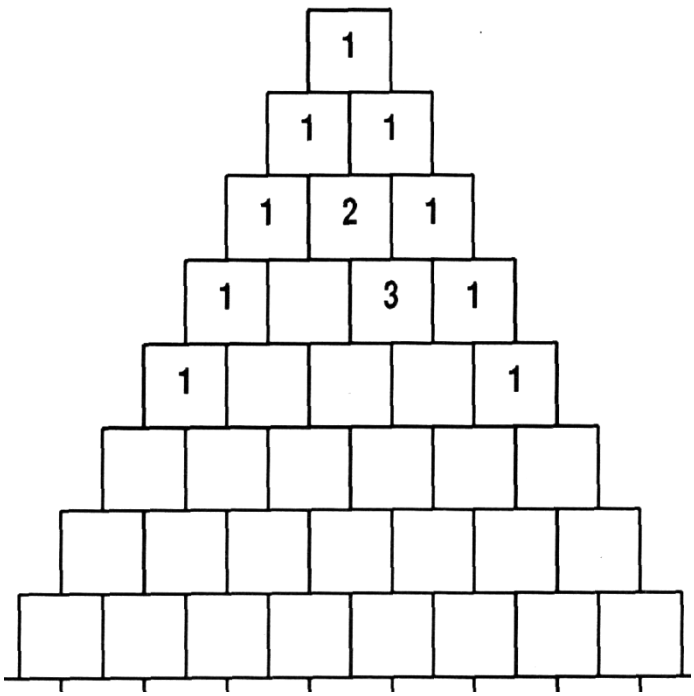


From 4 cards, how many ways can you choose 0, 1, 2, 3 or 4 cards?



From 5 cards, how many ways can you choose 0, 1, 2, 3, 4, or 5 cards?

Continue the pattern:



$$\frac{n!}{r!(n-r)!}$$

Fill in the white squares using the formula above.

	r	0	1	2	3	4
n						
1						
2						
3						
4						

$(x+1)^5$

$(3+2x)^3$

$(2x+\frac{5}{x})^3$

$(1-\frac{1}{2}x)^5$